

NWS Form E-5	U.S. DEPARTMENT OF COMMERCE	HYDROLOGIC SERVICE AREA (HSA) San Juan, Puerto Rico
(04-2006)	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REPORT FOR:
(PRES. BY NWS Instruction 10-924)	NATIONAL WEATHER SERVICE	March 2017
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE
		Odalys Martínez-Sánchez / FIC
		DATE 04/15/2017

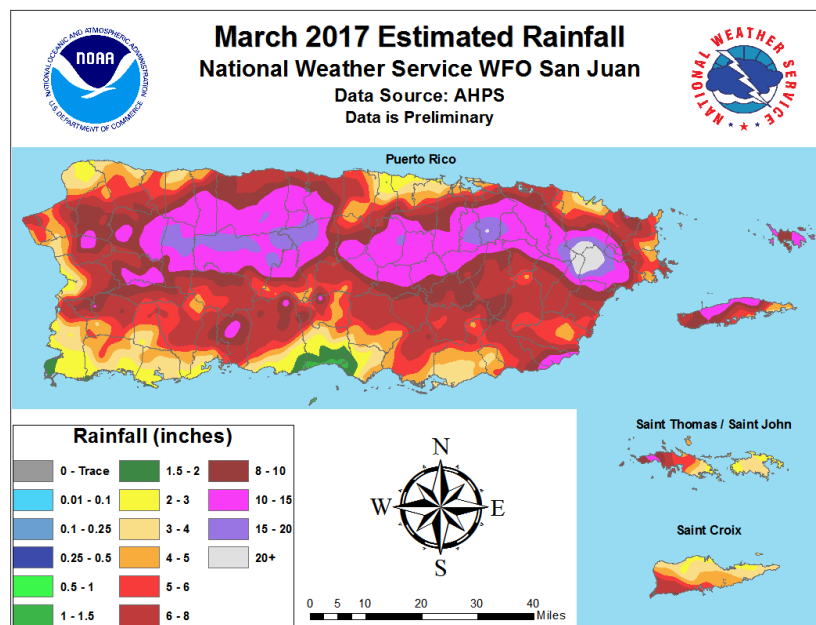
When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

☐ An X inside this box indicates that no flooding occurred within this hydrologic
Summary:

An active weather pattern was observed during March as a series of weather features affected the region, giving several sectors of the islands above to well above normal rainfall. A frontal boundary affected the region from March 5th to March 7th, producing rounds of numerous showers across most of Puerto Rico and the USVI. This weather feature also created very hazardous marine conditions. After a fair weather pattern around the middle of the month, a more active weather pattern returned from March 20th through the end of the month as a slow moving mid to upper-level trough developed across the western Atlantic. This produced a persistent southerly flow that helped to bring in abundant low to mid-level moisture across the region. This created a favorable environment for several rounds of moderate to heavy showers, which affected several sectors of the islands from time to time.

Based on the Cooperative Observer Network Data (COOP), 192 % of the normal rainfall was observed across PR. Preliminarily, an average rainfall total of 5.48 inches was measured, which is 2.62 inches above normal (Table 1). Across St. Thomas/St. John and St. Croix, an average rainfall total of 1.57 and 6.22 inches was observed respectively.

At the primary climatological data sites, a rainfall total of 6.40 and 5.83 inches was observed at Henry E. Rohlsen Airport in Saint Croix (TISX) and Cyril E King Airport in St Thomas (TIST), respectively. This is 4.84 and 4.41 inches above the normal rainfall at TISX and TIST, respectively. In fact, March 2017 ended as the wettest March on record at TISX and the 2nd wettest March on record at TIST.



March 2017 rainfall totals based on AHPS data.

River and Drought Conditions: The 28-day average streamflow from the U.S. Geological Survey (U.S.G.S.) river gauge network indicates most of the streamflows across Puerto Rico running above and well above the normal range. There is only one outlier in Juana Diaz which is running much below the normal range. D0 conditions across S and SE PR were removed.

Water Supply: Lake levels at water supply reservoirs are in optimum conditions. Three out of four representative wells along the southern slopes of Puerto Rico indicated an increasing trend in their levels.

Flood Conditions: Heavy rainfall across the local islands resulted in periods of urban flooding as well as rises along small stream and rivers. The rainfall observed during the last week of the month resulted in significant rises along Rio Riedras as well as Rio Comerio. In fact, Rio Comerio went out of its banks momentarily on March 29th.

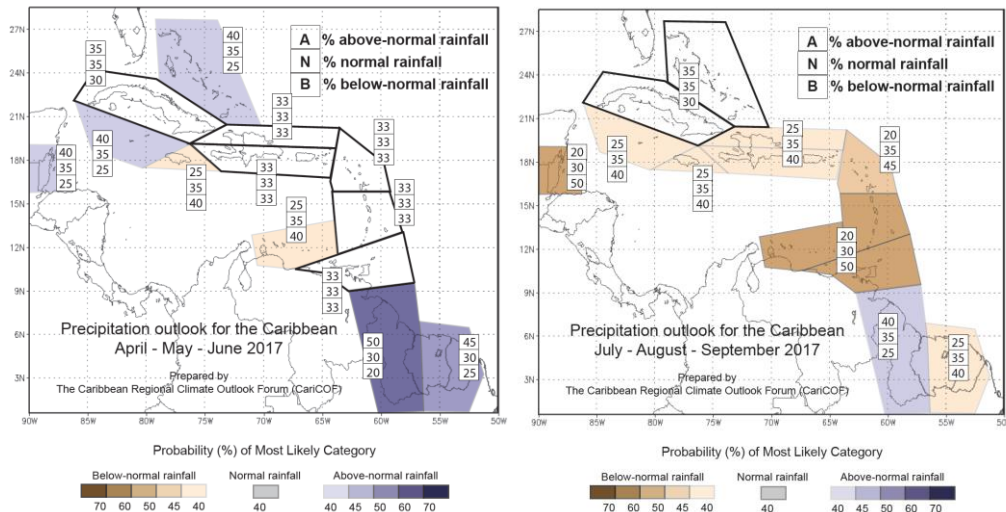
Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	1
Flood Watches (SJUFFASJU)	0
Flood Warnings (SJUFLWSJU)	0
Flash Flood Warnings (SJUFFWSJU)	1
Flash Flood Statements (SJUFFSSJU)	0
Urban/Small Stream Flood Advisories (SJUFLSSJU)	28

General Hydrology Information:

ENSO-neutral conditions are favored to continue through at least the Northern Hemisphere spring 2017, with increasing chances for El Niño development into the fall. However, forecasts made in March are notoriously unreliable due to the so-called spring predictability barrier.

Tropical North Atlantic Sea Surface Temperatures (SSTs) tend to remain slightly above average in the eastern half of the Caribbean Sea and around the US east coast, while the remainder of the region sees SSTs around average. Current anomalies are expected to persist throughout AMJ and JAS. As ENSO conditions are currently neutral, no impact on Caribbean rainfall is expected. However, with a possible El Niño forecasted by JAS, there are increased chances for drier than normal conditions in much of the Caribbean.

Warm SSTs in the NW Caribbean may lead to above-average humidity and atmospheric instability going out of the dry season, which tilts the odds towards a wetter first half of the wet season. Therefore, the risk for flooding across the area will remain near normal through at least the first half of the wet season.



More Info: <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>